Army Installation Geospatial Information and Services (IGI&S) Program Overview

Robert Carlos
Team/Systems Manager
OACSIM IGI&S Program
703-601-0385
robert.carlos@hqda.army.mil

2007 IGI&S Program Overview

Purpose:

- IGI&S Program Overview
- Goals
- Focus
- Accomplishments
- Planned FY07 Efforts
- Upcoming Changes

OACSIM Mission

Provide policy guidance and program management on all matters relating to overall management and resourcing of Army installations worldwide. Ensure the availability of efficient, effective base services and facilities.

All things Installations

2007 IGI&S Program Overview

ARMY UNIVERSE – FY07

Land Acreage
- United States –13,806,840
- Europe – 161,782
- Asia – 28,676
- Other Overseas – 15,235

Roads
56,487 miles

Paved Area
440 Million SY

Railroads
2,643 miles

Family Housing Units
- Owned - 37,879
- Leased - 12,874
- Privatized - 72,825

Barracks Requirements
136,000 Soldiers

PRV
$251B

Army Installations:

• IMCOM	74
• Reserves	4
• National Guard	45
• AMC	26
• Other	5

Army Demographics
54% married
9.1% dual military
6.9% single parents
712,815 family members

Environmental Clean-up Remaining
(Installation Restoration Program & Military Munitions Response Program)
- Active Sites – 1,540
- BRAC Sites - 285
- Formerly Used Defense Sites – 2,189

Army End-Strength

Active -	488,600
USAR -	189,000
ARNG -	333,200
Civilians-	209,400

Airfields
- 141 Fixed Wing
- 739 Heliports

Buildings
(million square feet)
- United States - 770
- Europe - 150
- Asia – 46
- Other - 7

Utilities
Electric, gas, water and sewer
- 47,803 miles

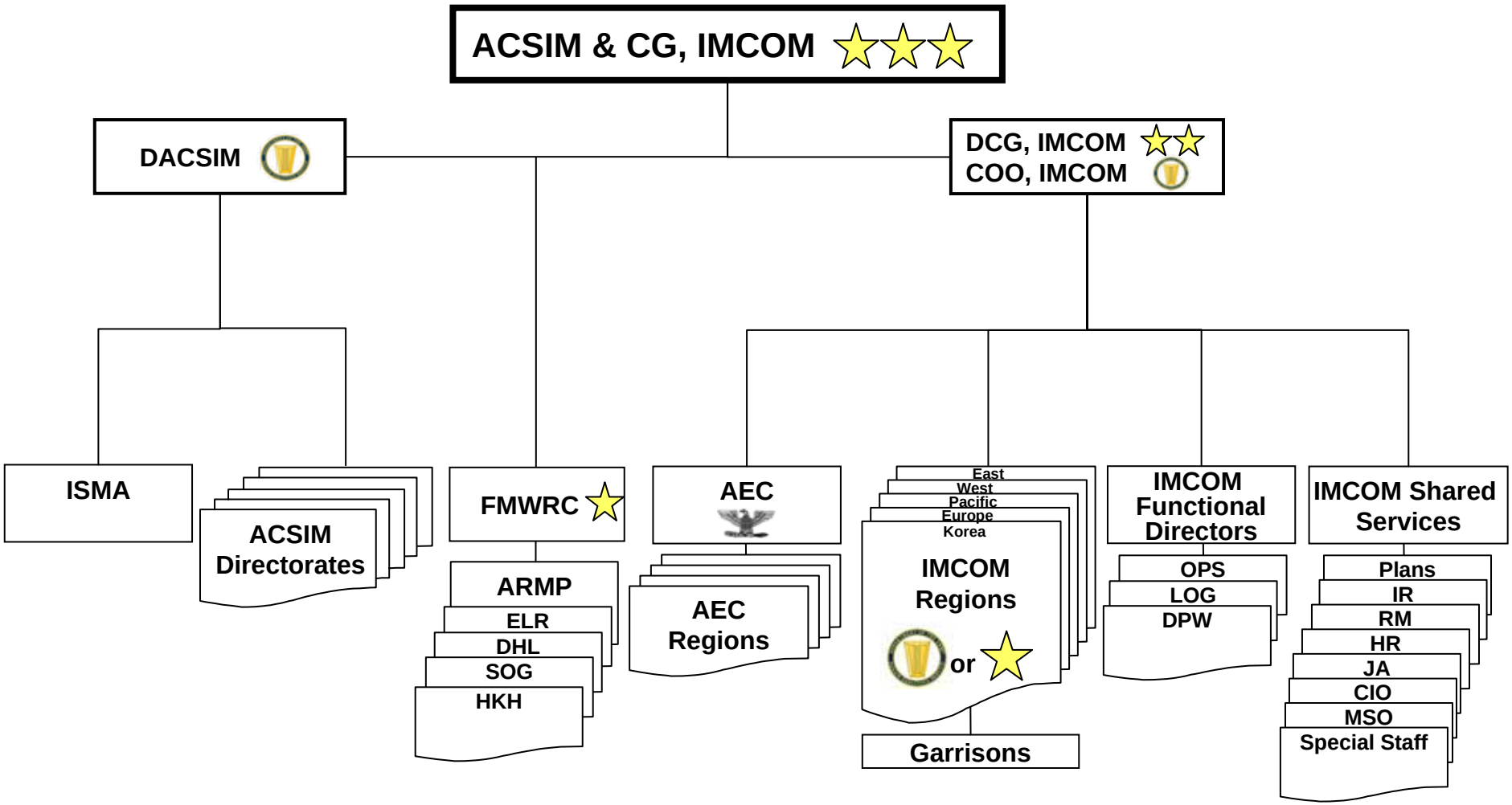
FY 06 Installation Management Resources = $15B per year

as of 30 Sep 06

Mr. Robert Carlos /DAIM-ZS/703-601-0385/robert.carlos@hqda.army.mil

2007 IGI&S Program Overview

Organizational Structure



As of 25 SEP 06

IGI&S Program Background

- **2001 GISR established as repository for standardized GIS data for installations and environment**
- **2001 - 2006 – Establish IGI&S Program and integrate with OSD/Defense Installation Spatial Data Infrastructure (DISDI)**
- **2004 - GISR expanded to support BRAC 05 through the Installation Visualization Tool (IVT)**
- **2006 – Building standard IGI&S capability**

IGI&S Program Drivers

- **EO 12906**
  - Requirement to standardize documentation of Geographic Information Systems (GIS) data
  - Requirement for enterprise access of GIS data documentation
- **OMB A-11**
  - Requirement to track and report IT expenditures through a portfolio management system
- **SECARMY Memo 80% reduction**
  - Consolidate GIS servers
  - Reduce redundant/stovepipe GIS system
- **AAA Audit on Range Inventory**
  - Reconcile geospatial range data with Real Property data
  - DACSIM (Ms. Menig) directed compliance
- **I&E Enterprise Transition Plan (ETP)**
  - Identify and consolidate GIS capabilities into the enterprise
  - Common geospatial standards by May 07
  - GIS consolidation plan by June 07
  - Common GIS capability by September 2009
- **Real Property Requirements**
  - Environmental Liabilities reconciliation with real property assets
  - Land reporting by acquisition parcel (Federal Real Property Council (FRPC)/EO 13327)
- **DoD Guidance**
  - Defense Installation Spatial Data Infrastructure (DISDI) standardization of GIS data
  - Compliant with other Services GIS initiatives

Army IGI&S Goals

1. Provide basic I&E geospatial capability Army-wide via the GISR using data from across HQDA, OACSIM and Garrisons.
2. Develop standard I&E GIS data and functionality
3. Increase availability of the GIS capabilities to all users
4. Eliminate redundant GIS capabilities by 30 SEP 09

OACSIM/IMCOM GISR Goals

1. Provide basic I&E geospatial capability Army-wide via the GISR using data from across HQDA, OACSIM and Garrisons.
2. Develop standard I&E GIS data and functionality
3. Increase availability of the GIS capabilities to all users
4. Eliminate redundant GIS capabilities by 30 SEP 09

IGI&S Program Focus

- Establishing lines of communication
  - DISDI to OACSIM to IMCOM to Regions to Garrisons
- Institutionalizing IGI&S
- Partnering with other Services
- Coordinating across HQDA
- Integrating with war fighter
- Populating GISR
- Supporting migration to standard Army GIS solution
- Establishing Army IGI&S standards

FY06 IGI&S Accomplishments

- **Drafted GIS data and metadata standards for installations**
- **Established central GIS repository of standardized I&E GIS data**
  - Cataloging 65,000 GIS data files from installation data calls
  - Drafted GIS data layer proponency list and quality assurance plans
- **Established centralized configuration control of GIS application**
  - Foundation for installation enterprise GIS capability
  - First Common Access Card (CAC)/Single Sign On (SSO) enabled application within OACSIM
  - Developing consolidation methodology and consolidating up to 12 GIS systems, completion by Sep 07
  - Building capabilities to create and submit standardized GIS data from installations
- **Established GIS BPA contract vehicle**
  - Reduced GIS software costs by 4% across I&E domain
- **Migration Phase I Initiated**
- **Integrated with Sustainable Range Program (SRP)**

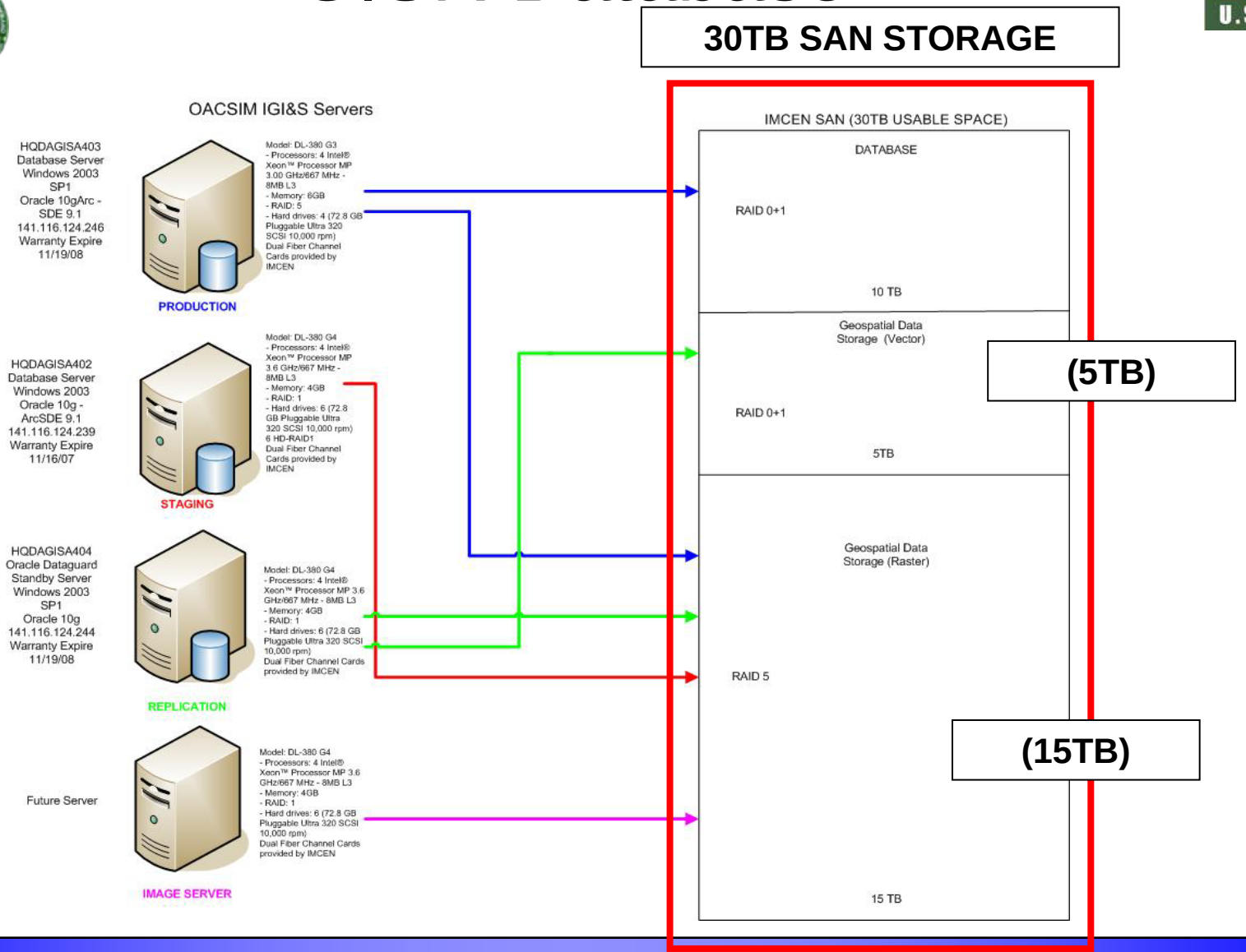
Planned FY07 Efforts

- Data Standardization
- Migration
- Lean Six Sigma for IGI&S
  - Funding
  - Roles and Responsibilities
  - Organization Structure
- Finalize IGI&S regulation
- Coordination with DISDI

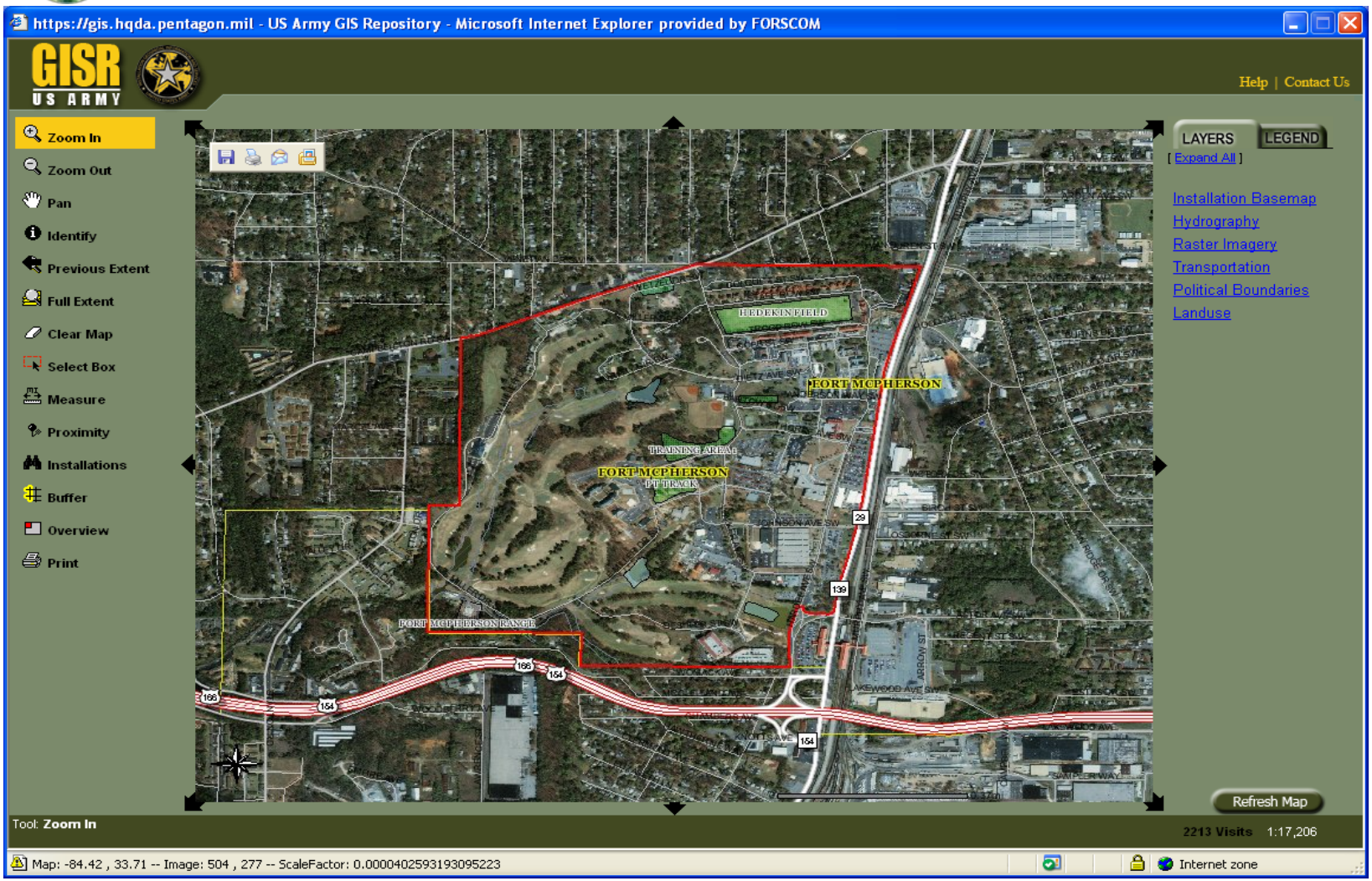
Army IGI&S System Overview

- Army enterprise geospatial solution with two components
  - Geospatial Database of Record: Geographic Information System Repository (GISR)
    - Maintains installation geospatial data layers
    - All I&E (includes SRP/ITAM) spatial data will be stored within GISR
  - GIS Application: … also called GISR
    - https://gis.hqda.pentagon.mil/
    - Online GIS visualization and analysis tool for I&E domain utilization
    - Limited scope: designed to support IVT/BRAC

GISR Database



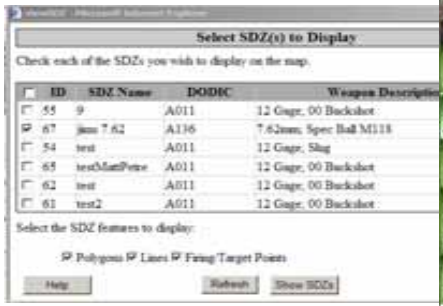
GISR Application



What have we accomplished?

- AKO Single Sign On and CAC enabled site

- The Army BRAC Division analysis
  - This supports the creation of real property parcels to facility property transfer for closing installations

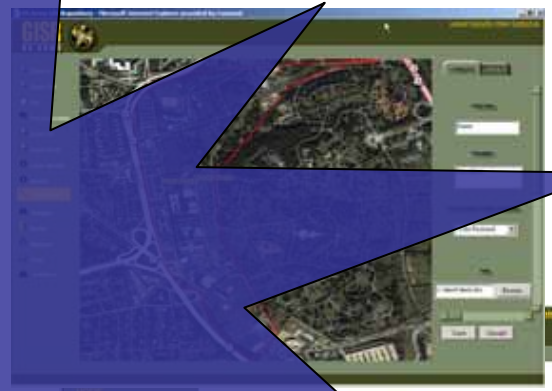


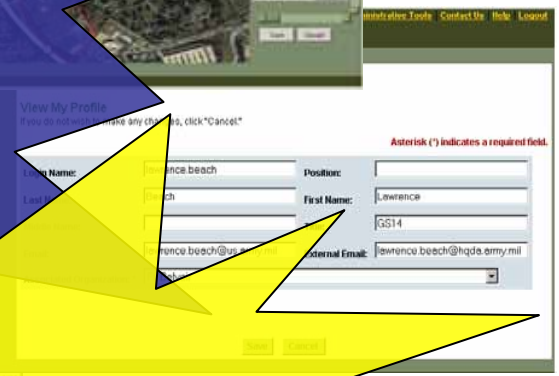
- SRP Mapper Prototype Development
  - This includes hosting a web-based SDZ tool as well as the use of Fort X Special symbology and map printing capability

Where are we going?

- Data Upload and Download
- Business System Integration
- Data Creation Tools
- New Data Model
- Redesigned User Interface

ON HOLD!!!





What's the Deal?
WHY?!?

The Answer…

- Army System Migration
  - DoD and Army requirement for a single solution to support business mission transformation at installations and headquarters
  - Develop a common geospatial system that supports installation geospatial requirements
  - System will consist of two components:
    - Geospatial Database = GISR
    - Application = Army Mapper

Migration Phases

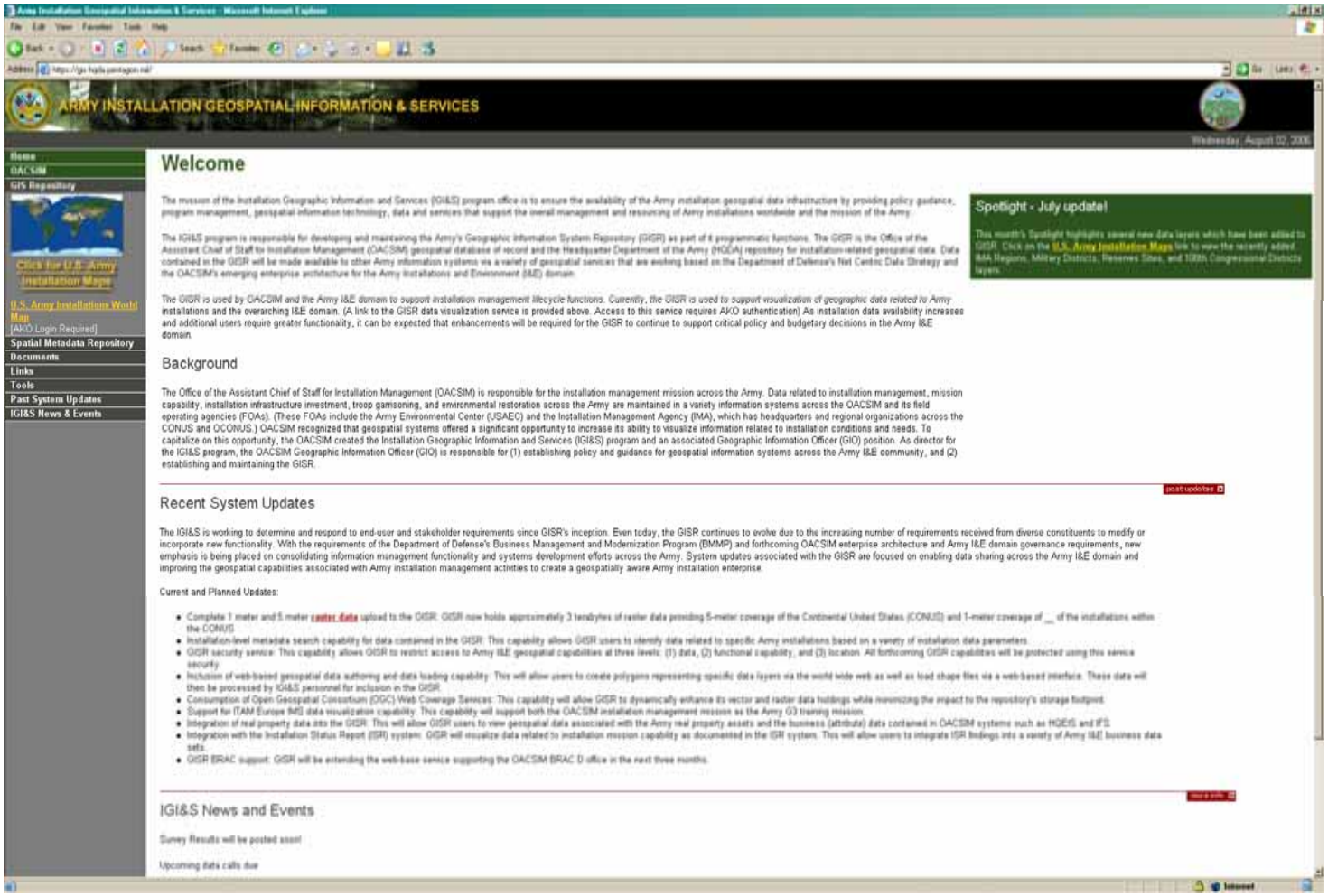
- Phase I – Basic IGI&S Capability
- Phase II – Consolidate
  - Analyze existing systems for best of breed capabilities
  - Develop target GIS architecture due January 07
  - Develop standard GISR based on target architecture (Initial operating capability Sep 2007)
- Phase III – Develop full data and analysis capabilities to “Army Mapper”
- Phase IV – Expand support to additional business processes

The Questions

- Who came up with this idea?
- How to build a system that supports the stakeholder requirements?
- Who is involved in this effort and who is impacted?
- What happens to legacy systems?
- What capability will the system support?
- Where is my data stored?
- Are we crazy?
- ?

Army IGI&S Website

https://gis.hqda.pentagon.mil



Questions?

Robert Carlos
Team/Systems Manager
OACSIM IGI&S Program
703-601-0385
robert.carlos@hqda.army.mil

Jim Furlo
OACSIM IGI&S Program
703-602-2852
James.furlo@hqda.army.mil